

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Staphylococcus	Accessory gene regulator cognate receptor (AgrC receptor)	<p>An <i>in vitro</i> study suggests autoinducing peptide III (AIP-III) mimetics that inhibit AgrC receptors could help treat toxic shock syndrome and <i>Staphylococcus aureus</i> infections. In cultured <i>S. aureus</i> cells, analysis of AIP-III-based macrocyclic peptides led to the development of peptide mimetics that inhibit AgrC receptors with picomolar potency. In coculture, addition of the peptide mimetics decreased <i>S. aureus</i> hemolysis compared with addition of native AIP peptides. <i>In vitro</i>, the peptide mimetics decreased toxic shock syndrome toxin-1 production by <i>S. aureus</i> compared with control peptides. Next steps include identifying the mechanisms of action for the analogs, increasing their potency and stability and testing them in animal models for infection.</p> <p>SciBX 6(21); doi:10.1038/scibx.2013.520 Published online May 30, 2013</p>	Patent application filed; available for licensing from the Wisconsin Alumni Research Foundation at the University of Wisconsin-Madison	Tal-Gan, Y. <i>et al.</i> <i>J. Am. Chem. Soc.</i> ; published online May 6, 2013; doi:10.1021/ja3112115 Contact: Helen E. Blackwell, University of Wisconsin-Madison, Madison, Wis. e-mail: blackwell@chem.wisc.edu